

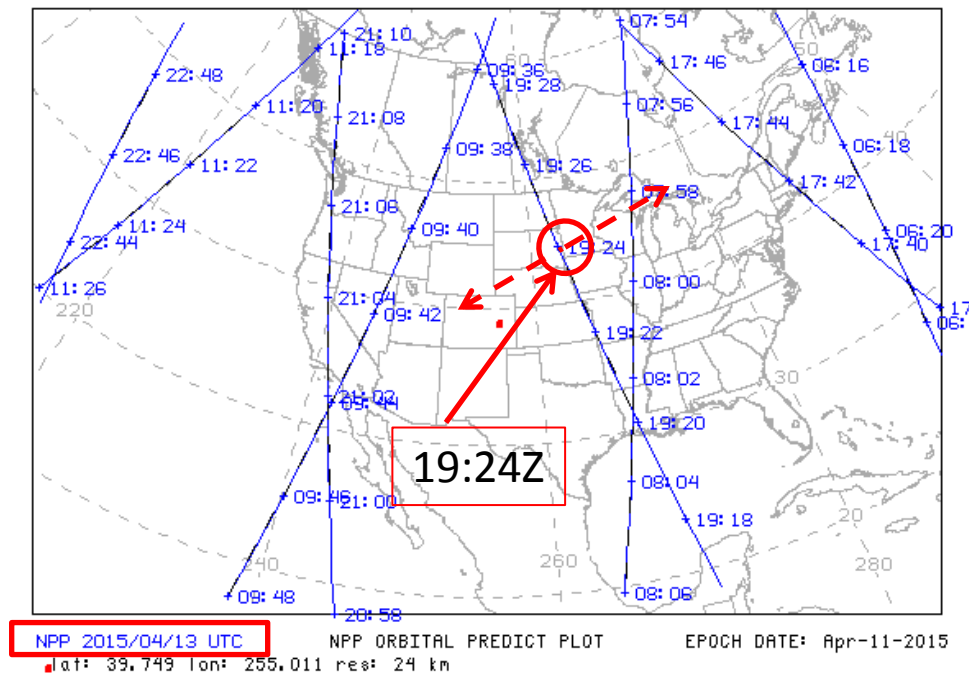
RAQMS 20150412 SONGNEX

54hr FX for 18Z April 13, 2015

S-NPP (CrIS) overpass on 2015/04/13

NUCAPS CO₂, O₃, CO, CH₄ Validation Opportunity –*near western edge of swath*

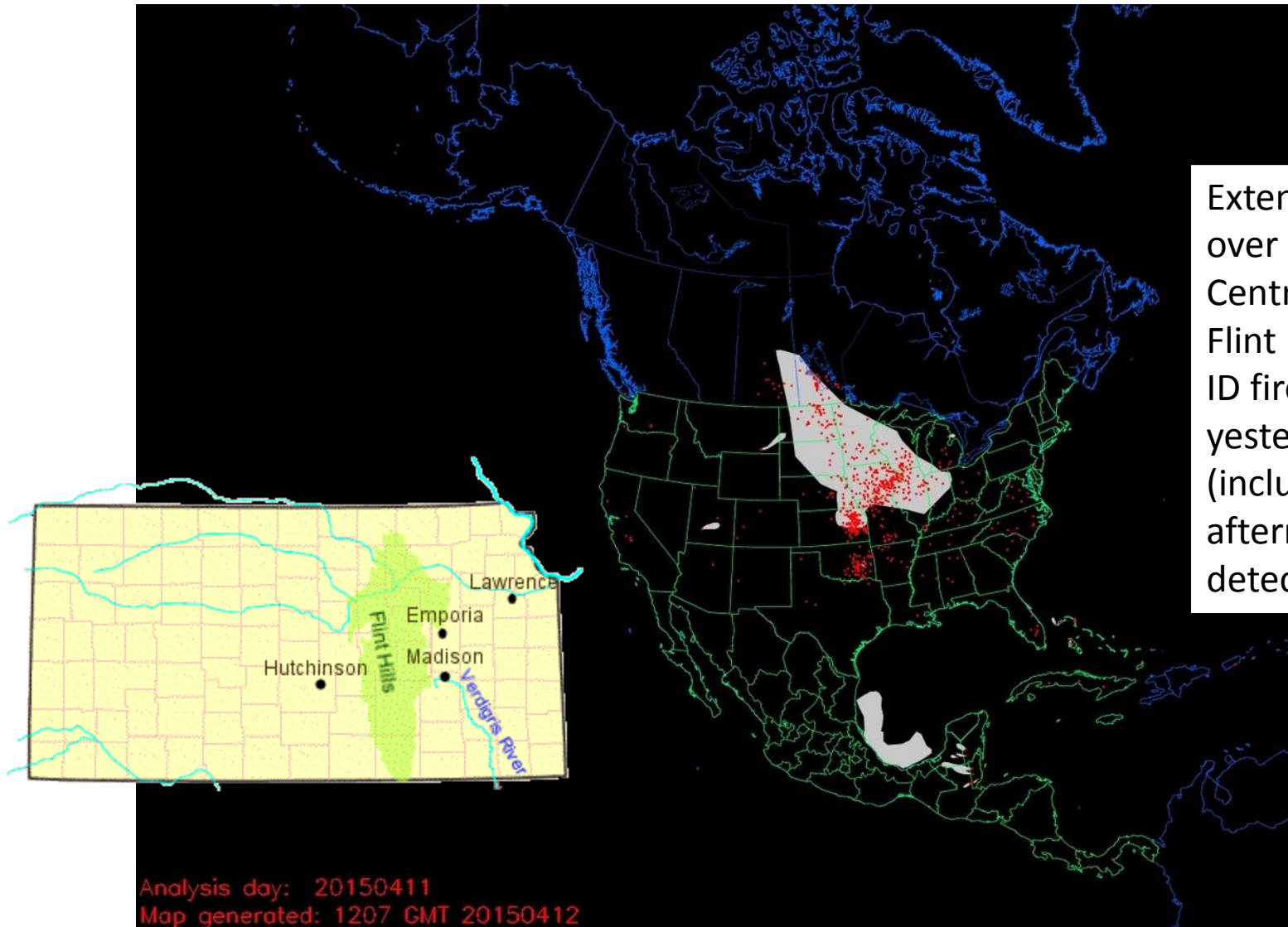
S-NPP overpass over Denver at 19:24Z (1:24pm Mountain)



Approximate swath width

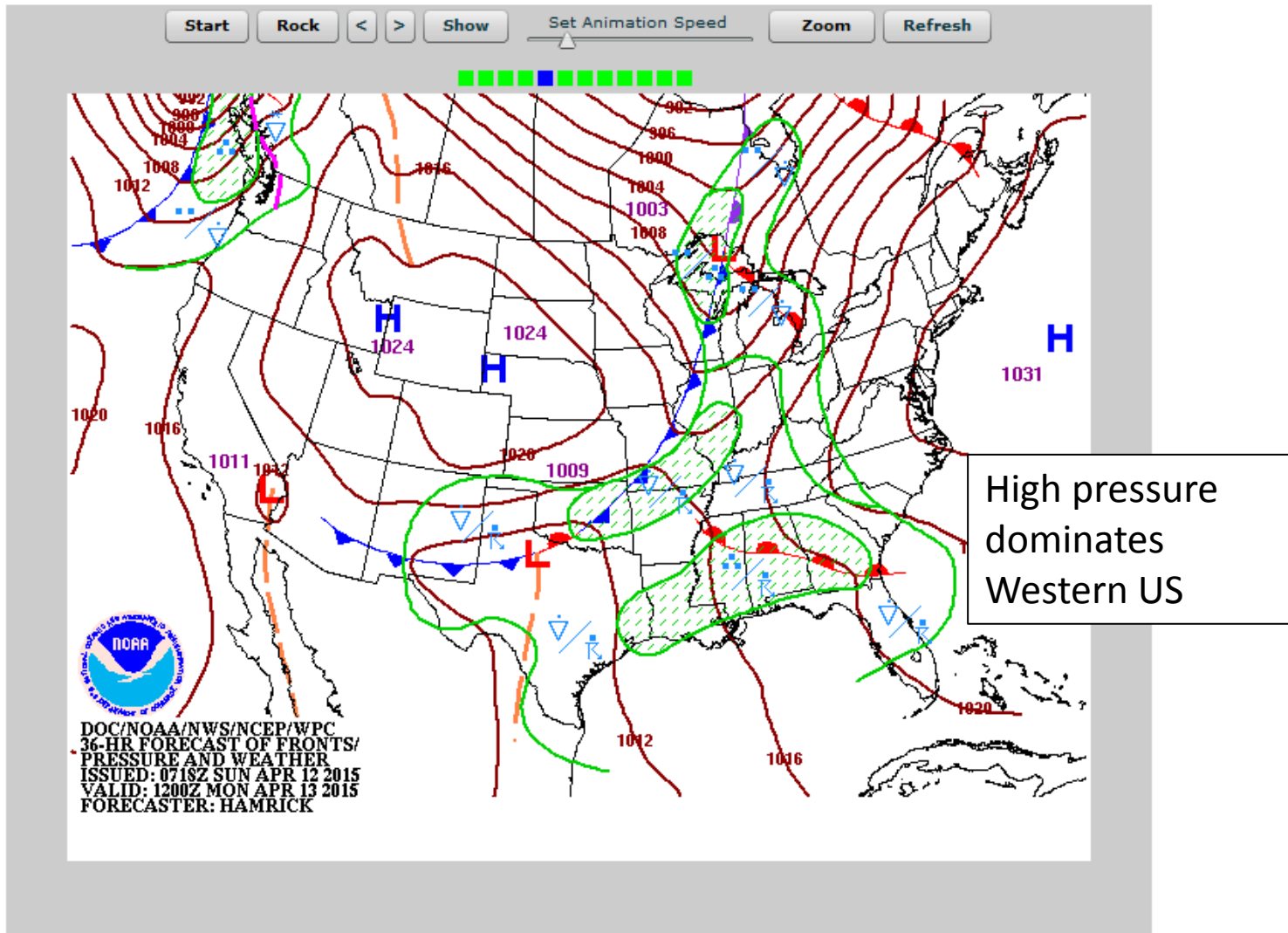
NESDIS Hazard Mapping System (HMS)

<http://www.ospo.noaa.gov/data/land/fire/currenthms.jpg>



Extensive smoke
over North
Central US due to
Flint Hill, OK, and
ID fires present
yesterday
(including
afternoon
detection)

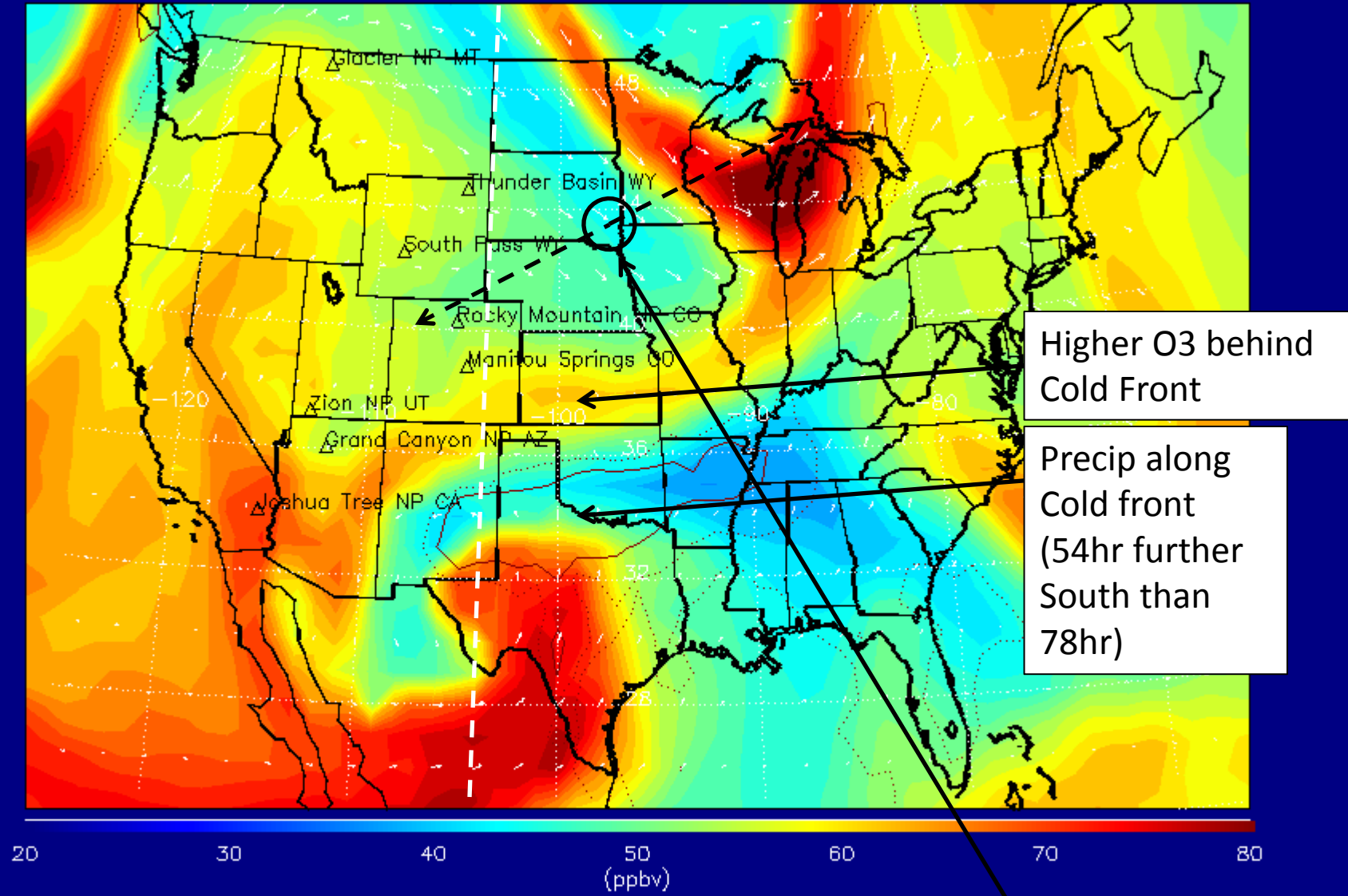
36hr NCEP/WPC forecast valid 12Z 04/13/2015



<http://www.hpc.ncep.noaa.gov/basicwx/day0-7loop.html>

05km O₃ 18Z 20150413

(MSL Pressure Contoured (white)/95-75% Convective Precip (Red) 95% CPO=0.231344 mm/hr



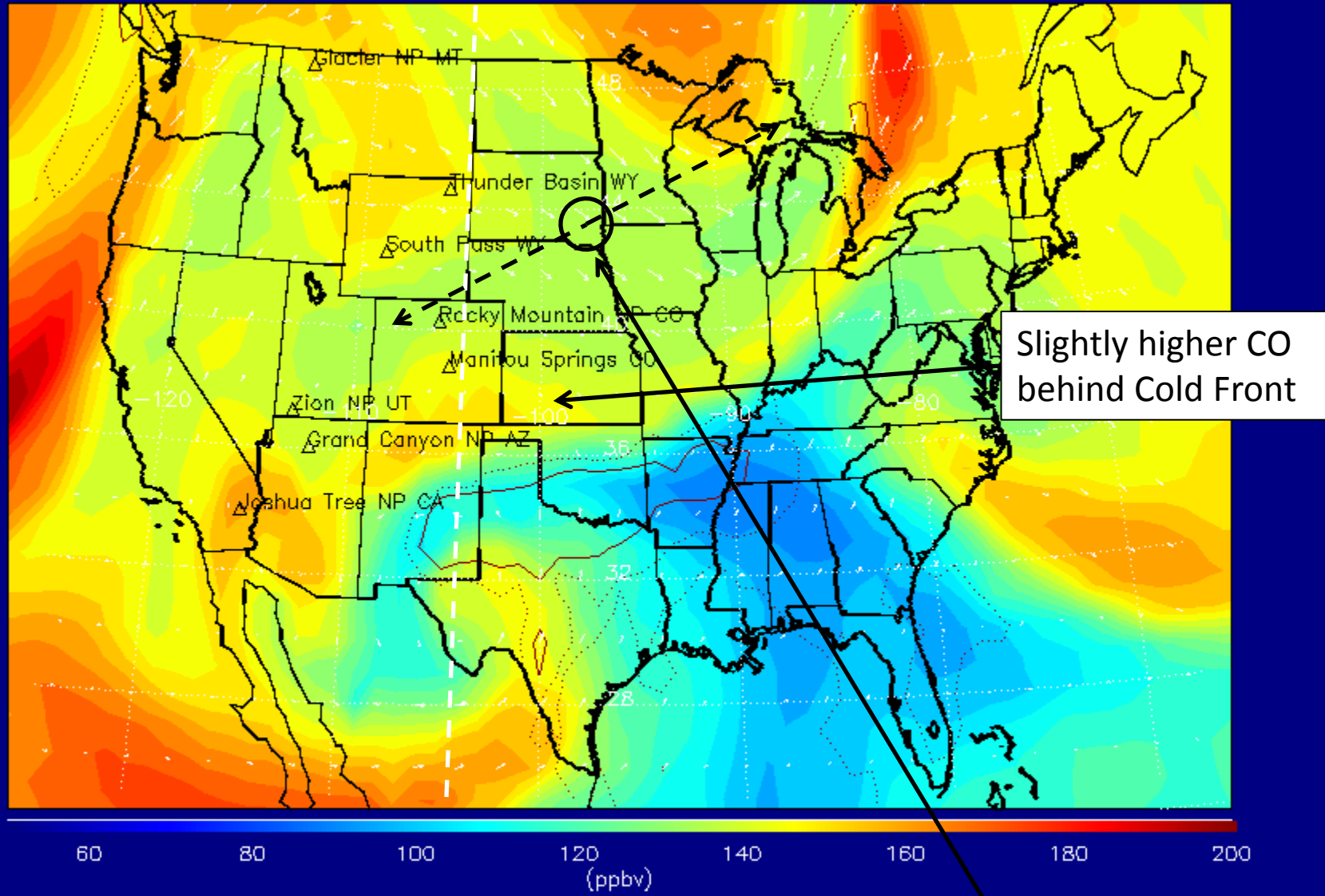
RAQMS₆ 54hr Fx Initialized 12Z 20150411

Denver on western edge of S-NPP swath

Approximate swath width

05km CO 18Z 20150413

(MSL Pressure Contoured (white)/95-75% Convective Precip (Red) 95% CPCP=0.231344 mm/hr



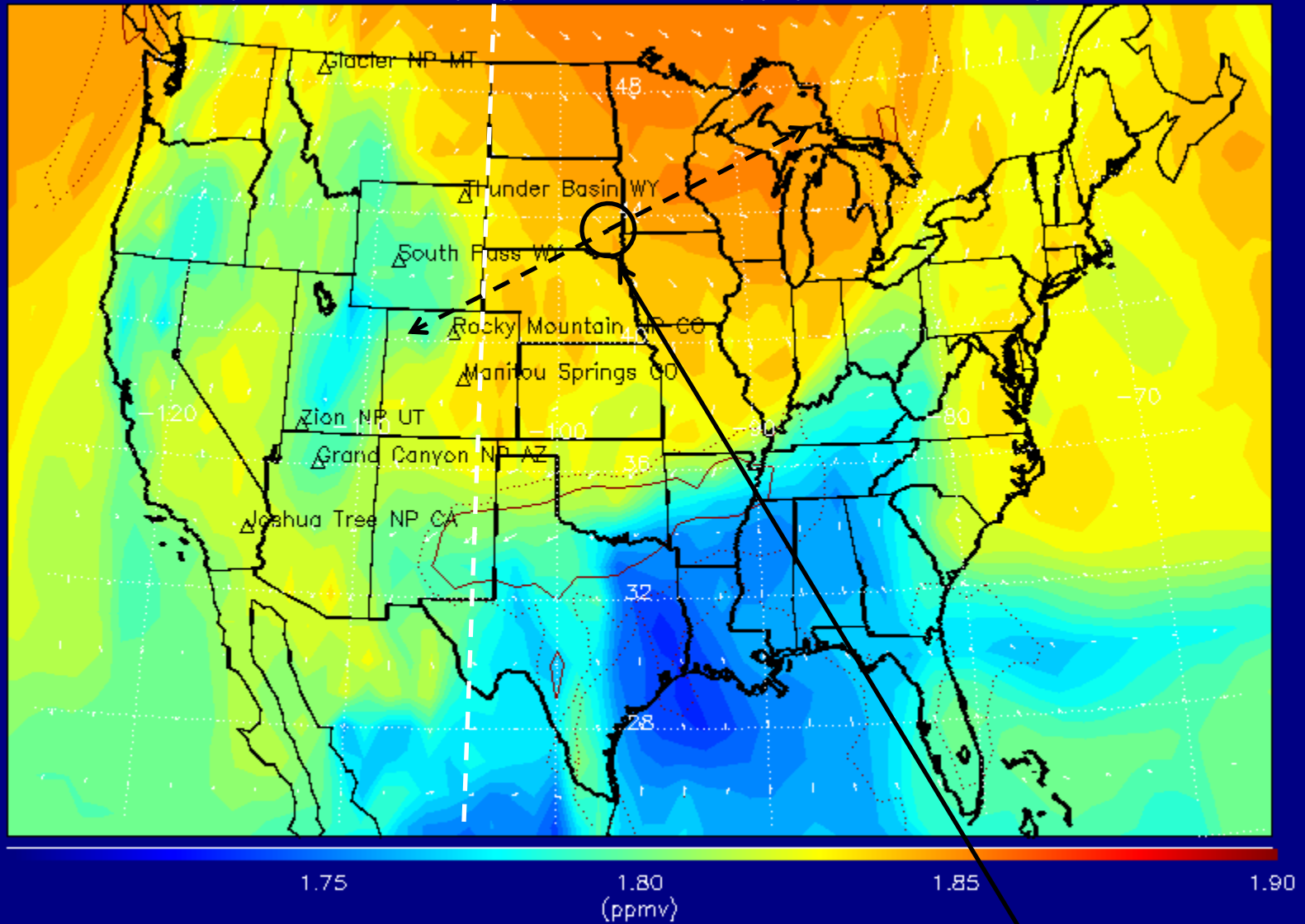
RAQMS₆ 54hr Fx Initialized 12Z 20150411

Denver on western edge of S-NPP swath

Approximate swath width

01km AGL CH4 18Z 20150413

(MSL Pressure Contoured (white)/95-75% Convective Precip (Red) 95% CPCP=0.231344 mm/hr

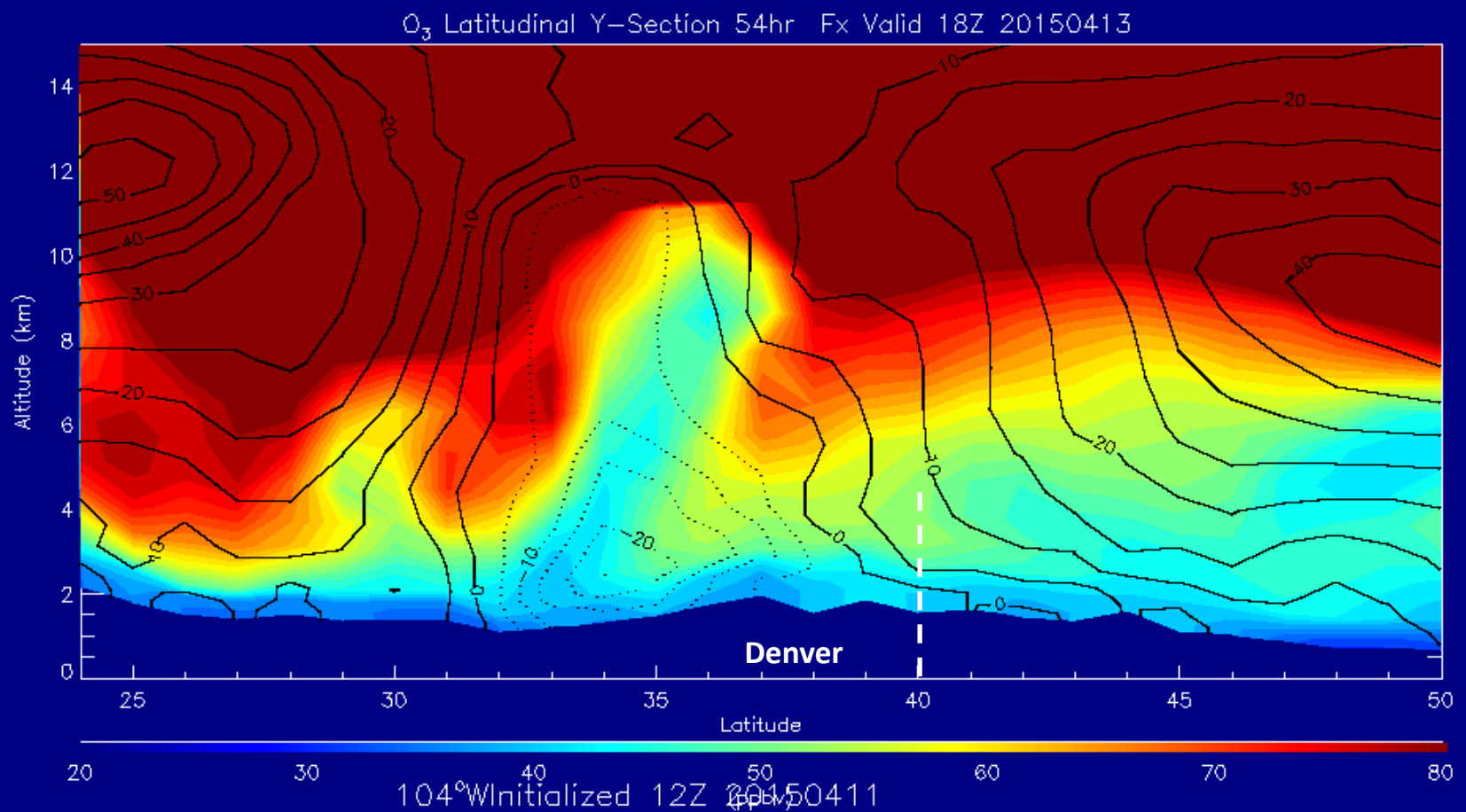


RAQMS₀ 54hr Fx Initialized 12Z 20150411

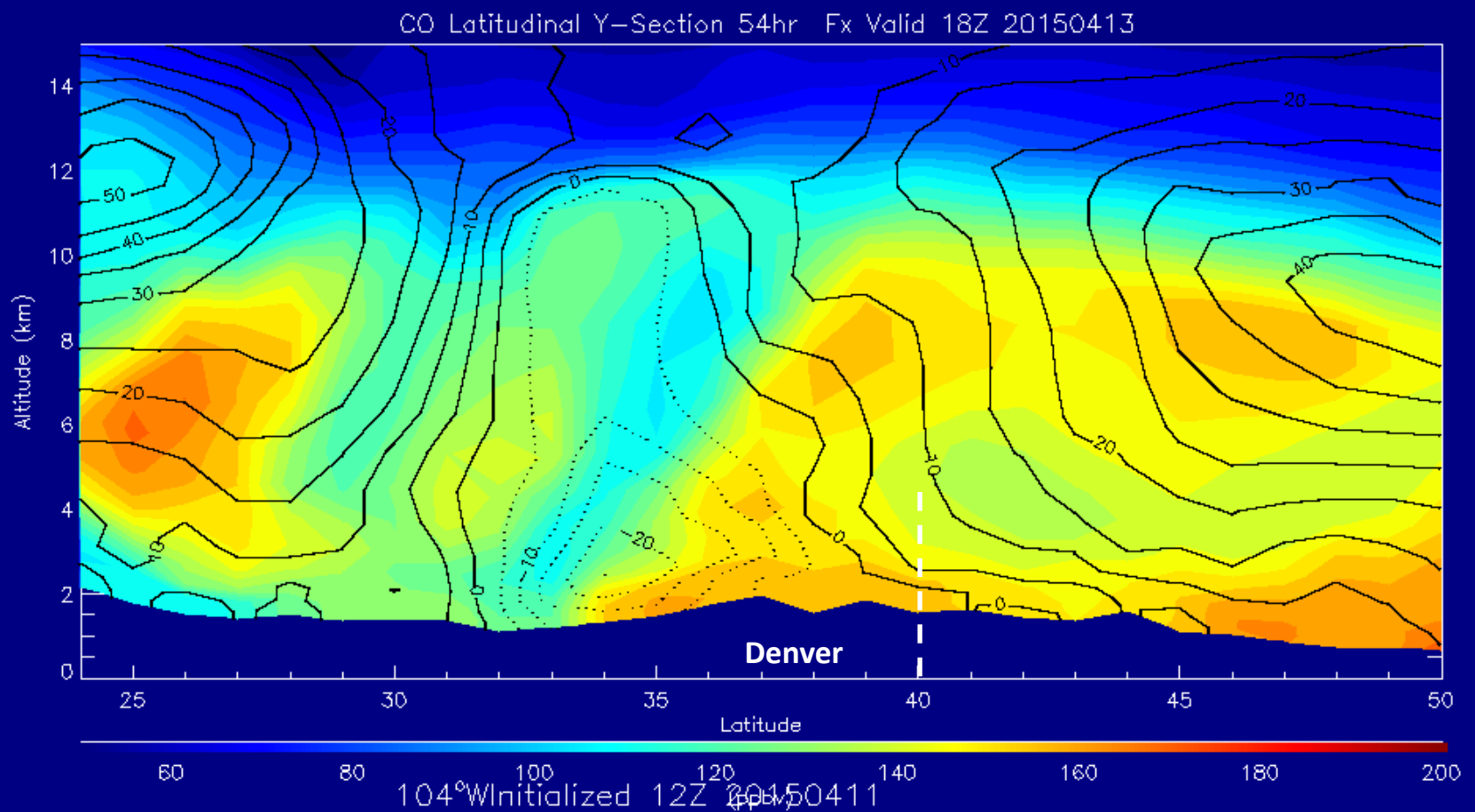
Denver on western edge of S-NPP swath

RAQMS surface CH4 constrained with 1990 mixing ratio – introduces ~0.1ppmv low bias

RAQMS 54hr FX O₃ Cross-section at 104W (Denver, CO)



RAQMS 54hr FX CO Cross-section at 104W (Denver, CO)



RAQMS 54hr FX CH₄ Cross-section at 104W (Denver, CO)

